

*TM* 2663

PATENT



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of

Mayer D. SCHWARTZ et al

Art Unit: 2663

Application No: 09/535,676

Examiner:  
Derrick W. Ferris

Filed: March 23, 2000

For: DEMULTIPLEXING A STATISTICALLY  
MULTIPLEXED MPEG TRANSPORT STREAM INTO  
CBR SINGLE PROGRAM TRANSPORT STREAMS

REPLY TO THE OFFICE ACTION MAILED 01/19/2006

COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Sir:

Further examination and consideration of this application are requested in view of the following Amendments and Remarks.

DESCRIPTION AMENDMENTS

Rewrite the paragraph beginning on page 6, line 11, to read as follows:

The above is illustrated in Fig. 3 where a series of frames of variable bit rates is shown. In this explanation,  $DTS_j$  is the decode time stamp for frame  $j$ , i.e.  $td_n(j)$ , and  $Q_j$  is the size in bits of frame  $j$ . At time  $\delta$  before  $DTS_1$ , frame 1 begins loading into the buffer and continues loading until time  $\delta + R_n * Q_1$  before  $DTS_1$ . The buffer may be thought of as having a plurality of equal capacity slots between consecutive  $DTS$  times. Since frame 1 has fewer bits than the capacity of one slot,  $R_n * Q_1 / R_n$  is less than  $DTS_2 - DTS_1$  and there is a gap before frame 2 starts loading into the buffer, at time  $\delta$  before  $DTS_2$ . Likewise frame 3 starts loading at time  $\delta$  before  $DTS_3$ . Frame 3 has more bits than fit into one slot, so  $R_n * Q_3 / R_n$  is greater than  $DTS_4 - DTS_3$  and frame 3 does not finish loading until after time  $\delta$  before  $DTS_4$ . Consequently, frame 4 begins loading into the buffer as soon as possible after loading of frame 3 is complete. Then frame 5 begins loading into the buffer as soon as possible after loading of frame 4 is complete. The end of frame 5 almost exceeds the  $DTS$  time for frame 5 ( $DTS_5$ ) and the buffer is in danger of overflowing. However the next few frames 6, 7 and 8 each have fewer bits than one slot so that the capacity of the buffer is alleviated.